Serial No.: 09/990,909

Filed: November 16, 2001

Page : 2 of 10

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for determining if an person individual has Autism, comprising the steps of:

obtaining a stool sample from the individual;

analyzing the stool sample to determine the presence <u>or absence</u> of <u>one or more</u> antigens associated with a <u>plurality of one or more</u> different pathogens <u>selected from the group</u> <u>consisting of *Helicobacter pylori*, Cryptosporidium, *Entamoeba histolytica*, Giardia, Rotavirus, Camphylobacter, and *Clostridium difficile*; and</u>

identifying the presence of a plurality of different antigens the one or more different pathogens in the stool sample as a biomarker that indicates that the individual has Autism.

- 2. (Previously Presented) The method of claim 1, wherein the step of analyzing comprises performing a stool immunoassay.
 - 3-6. (Canceled).
- 7. (Currently Amended) The method of claim 1, wherein at least one of the plurality of one or more different pathogens is *Helicobacter pylori*.
 - 8-29. (Canceled).
- 30. (New) The method of claim 1, wherein at least one of the one or more different pathogens is Cryptosporidium.

Serial No.: 09/990,909

Filed: November 16, 2001

Page : 3 of 10

31. (New) The method of claim 1, wherein at least one of the one or more different pathogens is *Entamoeba histolytica*.

- 32. (New) The method of claim 1, wherein at least one of the one or more different pathogens is Giardia.
- 33. (New) The method of claim 1, wherein at least one of the one or more different pathogens is Rotavirus.
- 34. (New) The method of claim 1, wherein at least one of the one or more different pathogens is Camphylobacter.
- 35. (New) The method of claim 1, wherein at least one of the one or more different pathogens is *Clostridium difficile*.
 - 36. (New) A method for diagnosing Autism in an individual, the method comprising: obtaining a stool sample from the individual;

analyzing the stool sample to determine the presence or absence of one or more antigens associated with one or more different pathogens selected from the group consisting of *Helicobacter pylori*, Cryptosporidium, *Entamoeba histolytica*, Giardia, Rotavirus, Camphylobacter, and *Clostridium difficile*; and

identifying the presence of the one or more different pathogens in the stool sample as a biomarker that indicates that the individual has Autism.

- 37. (New) The method of claim 36, wherein the step of analyzing comprises performing a stool immunoassay.
- 38. (New) The method of claim 36, wherein at least one of the one or more different pathogens is *Helicobacter pylori*.

Serial No.: 09/990,909

Filed: November 16, 2001

Page : 4 of 10

39. (New) The method of claim 36, wherein at least one of the one or more different pathogens is Cryptosporidium.

- 40. (New) The method of claim 36, wherein at least one of the one or more different pathogens is *Entamoeba histolytica*.
- 41. (New) The method of claim 36, wherein at least one of the one or more different pathogens is Giardia.
- 42. (New) The method of claim 36, wherein at least one of the one or more different pathogens is Rotavirus.
- 43. (New) The method of claim 36, wherein at least one of the one or more different pathogens is Camphylobacter.
- 44. (New) The method of claim 36, wherein at least one of the one or more different pathogens is *Clostridium difficile*.
- 45. (New) The method of claim 1, wherein the stool immunoassay comprises detecting one or more polypeptides associated with one or more pathogens selected from the group consisting of *Helicobacter pylori*, Cryptosporidium, *Entamoeba histolytica*, Giardia, Rotavirus, Camphylobacter, and *Clostridium difficile*.
- 46. (New) The method of claim 37, wherein the stool immunoassay comprises detecting one or more polypeptides associated with one or more pathogens selected from the group consisting of *Helicobacter pylori*, Cryptosporidium, *Entamoeba histolytica*, Giardia, Rotavirus, Camphylobacter, and *Clostridium difficile*.
- 47. (New) A method of determining an individual's risk of developing Autism, the method comprising:

Serial No.: 09/990,909

Filed: November 16, 2001

Page : 5 of 10

obtaining a stool sample from the individual;

analyzing the stool sample to determine the presence or absence of one or more antigens associated with one or more different pathogens selected from the group consisting of *Helicobacter pylori*, Cryptosporidium, *Entamoeba histolytica*, Giardia, Rotavirus,

Camphylobacter, and Clostridium difficile; and

identifying the presence of the one or more different pathogens in the stool sample as a biomarker that indicates that the individual has increased risk of developing Autism.

- 48. (New) The method of claim 47, wherein the step of analyzing comprises performing a stool immunoassay.
- 49. (New) The method of claim 47, wherein at least one of the one or more different pathogens is *Helicobacter pylori*.
- 50. (New) The method of claim 47, wherein at least one of the one or more different pathogens is Cryptosporidium.
- 51. (New) The method of claim 47, wherein at least one of the one or more different pathogens is *Entamoeba histolytica*.
- 52. (New) The method of claim 47, wherein at least one of the one or more different pathogens is Giardia.
- 53. (New) The method of claim 47, wherein at least one of the one or more different pathogens is Rotavirus.
- 54. (New) The method of claim 47, wherein at least one of the one or more different pathogens is Camphylobacter.

Serial No.: 09/990,909

Filed: November 16, 2001

Page : 6 of 10

55. (New) The method of claim 47, wherein at least one of the one or more different pathogens is *Clostridium difficile*.

- 56. (New) The method of claim 1, further comprising treating an individual determined to have Autism with one or more digestive enzymes.
- 57. (New) The method of claim 36, further comprising treating an individual diagnosed with Autism with one or more digestive enzymes.
- 58. (New) The method of claim 47, further comprising treating an individual having increased risk of developing Autism with one or more digestive enzymes.
- 59. (New) The method of claim 56, wherein the one or more digestive enzymes comprise chymotrypsin.
- 60. (New) The method of claim 57, wherein the one or more digestive enzymes comprise chymotrypsin.
- 61. (New) The method of claim 58, wherein the one or more digestive enzymes comprise chymotrypsin.
- 62. (New) The method of claim 1, wherein the individual further exhibits one or more symptoms of Autism.
- 63. (New) The method of claim 36, wherein the individual further exhibits one or more symptoms of Autism.
- 64. (New) The method of claim 47, wherein the individual further exhibits one or more symptoms of Autism.